

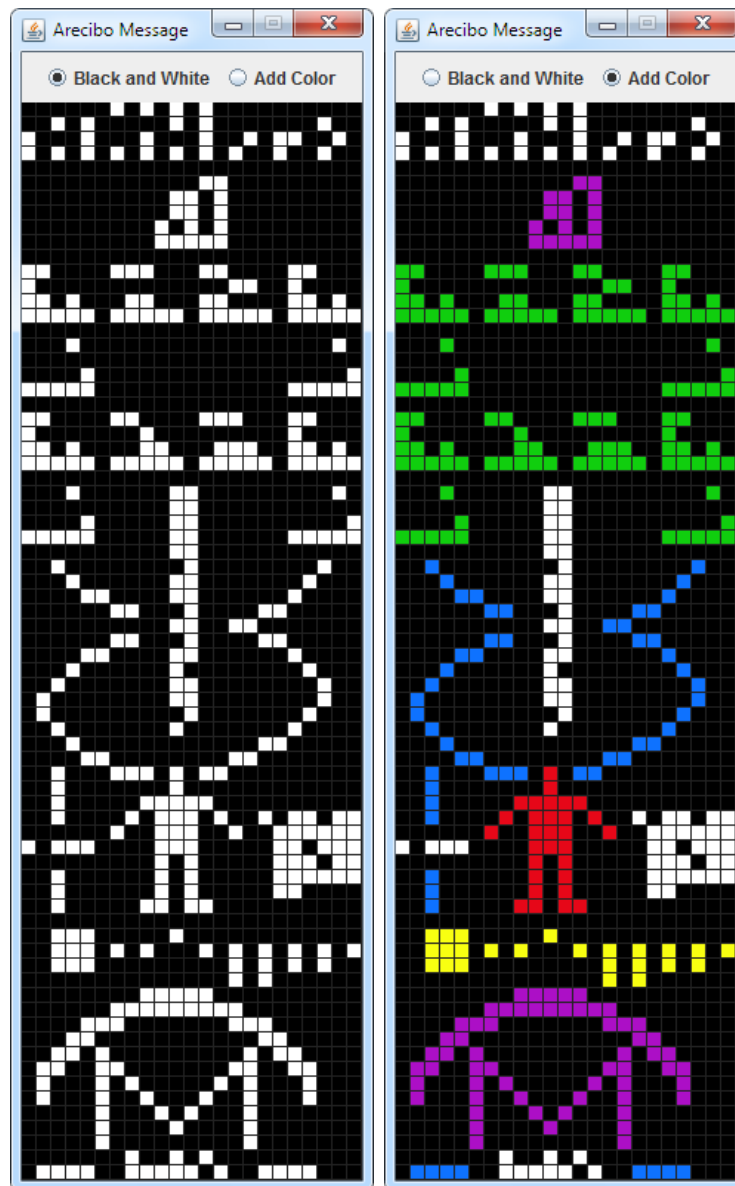
Extra Credit 1

CMSY-217, Spring 2013

50 points

The source code for this assignment must be submitted electronically using the Canvas course website prior to the start of class on Thursday, April 18.

1. Write a Java Swing application class called `AreciboMessage` which produces a visual representation of the broadcast sent from the Arecibo Telescope on November 16, 1974.
http://en.wikipedia.org/wiki/Arecibo_message.



2. There are two basic approaches to this problem:

- (a) Use Swing components exclusively.
- (b) Use some Swing components along with the Graphics API.

Allow the user to select whether the message should be displayed in black and white or in color. It is not sufficient to simply load two graphics files into an `IconImage` object and toggle them back and forth based on the state of the radio buttons.

3. The text file `arecibo.txt` provides a 73x23 grid of integers based on the following table.

Value	Name	Color
0	BLACK	<code>Color.BLACK</code>
1	WHITE	<code>Color.WHITE</code>
2	PURPLE	<code>new Color(172,15,198)</code>
3	GREEN	<code>new Color(16,206,14)</code>
4	BLUE	<code>new Color(14,114,255)</code>
5	RED	<code>new Color(230,7,24)</code>
6	YELLOW	<code>new Color(248,255,17)</code>

The GRID in the background is `new Color(35,35,35)`